

DIRECT TESTIMONY OF LOREN D. PFAU

Q: Please state your name, address, and present occupation.

A: My name is Loren D. Pfau. My office address is 707 17th Street, Denver Colorado. I am currently a Senior Manager in MCI's Mass Market Local Services Marketing Group, which handles the implementation and operation of local services for residential and small business customers. In this role I have responsibility for managing the rollout of resale services in the Pacific Bell region, among others.

Q: What is your educational and business background?

A: I have a Bachelor's of Science degree in Engineering Management from the University of North Dakota and an MBA from Virginia Polytechnic Institute and State University. I have been employed by MCI for over 8 years in a variety of finance and marketing positions. Prior to joining MCI I worked at a consulting firm and was a civilian engineer at a US Navy research and development laboratory.

Q: What is the purpose of your testimony?

A: The principal purposes of my testimony are to describe some of the major problems that MCI's customers continue to experience with resold local exchange service due to PacBell's method of processing resale orders and to offer some explanations as to why these problems continue to occur. I will also discuss difficulties MCI has encountered with PacBell's processes and practices for resolving service troubles for MCI resale customers.

Q: Would you begin by describing the general types of problems experienced by customers who seek local exchange service from MCI?

A: In the course of migrating from PacBell to MCI local exchange service, our customers have encountered numerous problems. In my present testimony I would like to focus on the four principal types. First, many have experienced involuntary loss of dial tone. Second, they have suffered unreasonable delay in obtaining the service arrangements of their choice. Third, some migrating customers have been dropped from the 411 database. Fourth, customers have lost features during migration.

Q: Let's discuss the first problem you mention. What does involuntary loss of dial tone entail?

A: Involuntary loss of dial tone means that an end user's phone "goes dead." The customer can neither make nor receive any calls. Though rare, sudden loss of dial tone can affect any end user at any time -- usually as a result of physical damage to equipment. Loss of dial tone during migration refers instead to human or computer error in PacBell's processing of a resale order. Unless I state otherwise, it is this latter type of dial tone loss I will be referring to. Either way, it is a tremendously serious problem, for an individual who loses dial tone would be unable even to call 911 in the event of an emergency.

Q: How long does loss of dial tone last?

A: Sometimes migrating customers might find their dial tone restored suddenly and inexplicably. In those cases I have no idea how long the outage may have lasted -- perhaps a few minutes, perhaps many hours. More often, restoration of dial tone requires

affirmative intervention by PacBell after MCI brings a particular incident to their attention. Although PacBell resale managers do not dispute that loss of dial tone is a very grave problem (see, e.g., Deposition Transcript of Susan Virginia Fischer (3/10/97), at 109), it sometimes takes over 24 hours for PacBell to restore dial tone to an MCI customer. Some have waited several days.

Q: Do you know how many MCI customers have lost dial tone during migration?

A: No, I don't. I am aware of at least 30 reported cases, the earliest occurring in September, the most recent occurring this month. It bears emphasis, however, that because MCI does not have continuous visibility into the integrity of an end user's connection, MCI can only become aware of a dial-tone loss when a customer calls to complain. Since MCI's customers might not be aware of a temporary loss of dial tone, or might not bother to report it if it is short lived, MCI has no way of knowing whether the 30 reported cases are just the tip of a substantially larger problem. Additionally, MCI did not always record instances of dial tone loss in the early months when we assumed that the reported problems were isolated occurrences; we began maintaining records only after we realized that the pattern of dial tone losses reflected a PacBell systems flaw that requires correction.

Q: PacBell has argued that the incidence of loss of dial tone experienced by end users migrating to MCI is equivalent to what its own end user customers experience "for a similar change in service." Does this representation mitigate your concern?

A: Not at all. First, I don't know what PacBell means in referring to "a similar change in

service." Because PacBell does not migrate its own customers to itself, I am skeptical that there exists any meaningful benchmark for purposes of comparison. In any event, the assertion is highly suspect because, as I just explained, nobody knows just how common dial-tone loss has been for MCI customers. Second, it is critical to keep in mind that Competitive Local Carriers (CLCs) are customers of PacBell no less than are end users that subscribe to PacBell retail service. Even if PacBell does indeed threaten its own end users with a risk of dial-tone loss comparable to the risk it imposes on end users that migrate to MCI, I believe that it is a failing PacBell's retail customers should not tolerate. It is, in any event, one that MCI is not willing to accept. And it is one that can be corrected. Accordingly, PacBell's excuse that the bad service it provides us should be acceptable because many of its end user customers put up with comparably bad service is no answer at all.

Finally, the issue is not simply the frequency of dial tone loss for PacBell and MCI end users but the duration of any such losses as well. As I will explain later in my testimony when discussing problems that MCI customers experience after migration has been completed, strong anecdotal evidence indicates that PacBell restores service to its own end users much more quickly than it does for MCI customers.

Q: The second problem you mention involves delay in processing resale orders. Would you explain what you are referring to?

A: The processing of a resale order involves at least three distinct and necessary outputs. After receiving an order from a CLC, an Incumbent Local Exchange Carrier (ILEC) like PacBell must first confirm to the CLC that the order has been received, is acceptable for

processing, and will be completed on a specified date. This information is contained in a communication called a Firm Order Confirmation (FOC). (If the order is not acceptable, the ILEC should send a reject instead of a FOC.) Second (and assuming the order was not rejected), the ILEC must actually execute the order. Third, the ILEC must inform the CLC that the order has in fact been completed. In the local service resale context, this is performed via a Notification of Completion (NOC). In the summer of 1996 when PacBell was trialing its resale order process with MCI, it told MCI and other CLCs that it would perform each of these three critical functions within specified timeframes: it will send a FOC within 4 hours of receiving the order; it will complete the order within three business days of receipt of the order for migrations (and within five business days on orders for new service); and it will send a NOC within 24 hours of completion. (In January, PacBell notified MCI of somewhat expanded timeframes: FOCs within 24 hours, and all order completions -- i.e., for migrations as well as for new service -- within five days.) Put simply, PacBell is not now, and has never been, even close to meeting these deadlines. More to the point, PacBell's chronic delay in completing orders and in communicating FOCs and NOCs causes concrete harms to MCI and to our customers.

Q: Let's talk about FOCs first. What is the extent of PacBell's delay and why does it matter?

A: PacBell's FOCs have been much delayed. On the more than 25,000 orders for new or migrated service MCI has submitted to PacBell, I am not aware of any instances in which a FOC was received within the initially promised time frame of 4 hours. A variety of factors make it impossible to calculate the average length of time it has taken PacBell to

return FOCs to MCI. First, there are literally thousands of outstanding orders on which FOCs are still pending. Second, PacBell has on many occasions completed an order, and sent MCI a NOC, without ever sending a FOC. For these reasons, among others, any "average time to FOC" would necessarily be a misleading statistic.

Highly revealing statistics are nonetheless available. For example, of all the FOCs MCI's Mass Markets Division has received to date, only 12% were received within 3 days after MCI sent the order. MCI's Business Markets Division has fared no better. Of all resale orders Business Markets sent to PacBell from December through the end of March, FOCs (or rejects) were still pending on over 40%, well more than half of which had been outstanding for 11 days or longer.

This delay is harmful because customers often make plans contingent upon expected completion dates. This is especially true for customers who are requesting new service from MCI (i.e., customers without pre-existing dial tone) instead of migrating existing service from PacBell. It may also be significant for a migrating customer that has requested new features or is changing to a different type of billing plan. (For example, many residential customers that switch from measured-rate billing with PacBell to flat-rate billing with MCI intend to increase their calling volumes after the switch, but are concerned not to change their calling patterns beforehand.) But MCI cannot tell our customers when the order will be executed until we receive the FOC. The longer it takes PacBell to send us the FOC, the more frustrated our customers become.

Furthermore, the more time MCI customer service representatives must spend checking with PacBell on the status of orders for which FOCs are past due, the less time they can devote to other tasks -- like taking new orders. This harm is exacerbated

because understaffing at PacBell's Local Interconnection Service Center (LISC) prevents MCI reps from receiving quick responses when we call to check on order status (or when we call for other reasons - for example, to request escalation or dropped features, or to select telephone numbers for prospective customers at the pre-order stage). PacBell wastes MCI time and resources that should be devoted to other purposes by keeping our customer reps on hold and by diverting our calls into voicemail.

Q: What is the extent of PacBell's delay in completing a resale order?

A: PacBell's performance in actually completing resale orders for MCI has been even worse than its delay in sending FOCs. Consistent with PacBell's original promises, MCI considers an order to be on "backlog" if more than three days have passed since MCI submitted the order (five days on orders for new service) and, as far as MCI knows, the order has not yet been completed. PacBell's chronic inability to complete orders in a timely manner is manifest in two fundamental ways: PacBell has had an ever-expanding backlog of MCI orders ever since MCI began submitting resale orders back in September; and PacBell has never averaged anything close to its three- and five-day promised completion times.

MCI brought the fact of PacBell's order-completion delays to PacBell's attention from the very outset and repeatedly emphasized the harm that such delays could cause our customers and our business. In part because we were operating in a fax environment, however, PacBell said it did not have complete records regarding which MCI orders were still outstanding. PacBell therefore requested that we re-send them every order that was on backlog. Accordingly, in late November, we printed and FedExed to PacBell every

order we had previously submitted to PacBell by November 5 and that was still awaiting completion. The shipment came to approximately 1280 orders. Although we since shipped approximately one-third of those orders yet again, twenty are still outstanding. While PacBell was struggling to complete the September and October orders, it was also unable to complete November and December orders in an acceptably timely fashion. In late December, therefore, we printed out, and shipped to PacBell, copies of all 2700 backlogged orders from November 5 through December 19. Nearly 150 of those orders remain on backlog to this day. From the first week of January through the first week of March -- and despite our constant urging that PacBell speed up its order processing -- at least 3500 MCI Mass Markets orders remained on backlog. By March 21, that number had increased to over 5500. As of last week, MCI Mass Markets Division was awaiting completion on nearly 7300 orders for which completion was overdue. The current Business Markets backlog stands at over 5800 lines.

Because so many orders remain outstanding, it is not possible to determine how long it takes PacBell to complete an order "on average." One way to get a sense of the magnitude of PacBell's delay in completing orders, then, is to start with a universe of completions (rather than of orders) and measure the timespan between each completion and the corresponding order submission. For all Mass Markets orders completed during last week (April 7-11), the average time from order submission to order completion was 29 days. Not only has PacBell not been close to completing orders within the three or five days it promised from receipt of the order, it routinely misses the scheduled due dates provided on the FOCs. Of all Business Markets orders PacBell completed as of April 4, only 11% were completed by the FOC-provided committed due date.

Q: What are the consequences of PacBell's delay in completing orders and of the order backlog?

A: Simply put, PacBell's delay frustrates customer choice. When a customer selects service from MCI, or any other CLC, she is voting with her feet. It is therefore a slap in the face of that customer, and perhaps a substantial unnecessary expense to her too, for PacBell to take weeks or even months before respecting her choice. The frustration of customer choice -- and of CLCs' fair opportunity to compete -- is especially acute in cases where a customer is requesting entirely new service. Imagine a customer who is moving to a new residence and is prepared to select her local phone service as much as a month in advance of the move. Because PacBell is so delinquent in fulfilling resale orders, MCI will not be able to assure the end user that we can furnish service by the time she will require it. In contrast, PacBell will promise the would-be customer that it can turn up new service on 3 days' notice. In short, PacBell's failure to execute resale orders in a timeframe that is even remotely comparable puts CLCs at a substantial competitive disadvantage and hinders free customer choice.

I am aware of specific cases in which customers faced with delays in obtaining MCI resold local exchange service became frustrated and returned to PacBell for service. MCI has discovered this pattern indirectly. Typically, a request for new service is sent to PacBell. No response is received until after the requested service date. A couple of days later, PacBell sends a rejection notice which informs MCI that the end user has called PacBell and ordered new service with the same telephone number. Obviously, consumers are entitled to seek out the telephone company that can provide them with prompt and efficient service. However, MCI is foreclosed from fulfilling the customers' most basic

need for dial tone by PacBell's refusal to process its requests for resold service in a timely manner. Whether intentional or not, PacBell's delay in processing MCI's orders for new telephone service constitutes a device by which customers are forced to subscribe to PacBell local service.

The growing backlog also makes it impossible for MCI to expand its presence in the market in order to satisfy latent customer demand. Because we are committed to assisting PacBell reduce the backlog so that they can process existing orders with less delay, we are constrained in marketing to new customers lest the backlog increase, thereby slowing down current processing even further. In short, MCI is effectively compelled to constrain its marketing efforts, at the expense of would-be customers, just because PacBell is so slow in completing pending orders submitted by MCI and other CLCs on behalf of other customers.

Q: Are all of these delays on orders for either migrations or new installations?

A: No. When an end user that has already successfully been made a customer of MCI (whether by migration or new installation) wants a change in service (say, to add or delete a vertical feature, or to change his directory listings), MCI must submit an order called a MACD (an acronym for "move/add/change/disconnect"). MACD orders are processed just like migration and new install orders in the sense that they too require FOC, completion, and NOC. And the statistics I presented above regarding the extent of PacBell's delay in sending FOCs and in completing orders encompassed MACD orders as well as other types of orders. Lest there be any doubt, the harm PacBell causes MCI customers by delaying completion of MACDs is, in general, as great as the harm PacBell

causes by delaying migrations.

Consider, for example, MCI's customer, Mr. Carl Beels. After Mr. Beels migrated his local service to MCI, he had MCI place a MACD order with PacBell to restore his call forwarding, call forwarding busy, and call forwarding no answer service. Mr. Beels is a private investigator and these services are essential to the operation of this business. It took two weeks to have the services restored, although the calls were then forwarded to the wrong number, a problem that took another 3 days to correct. (See Declaration of Carl Beels, Attachment 1). Mr. Beel's experience contrasts with that of PacBell customers who call up PacBell to change their current PacBell service. The PacBell service representative can instantly confirm the customer's existing service by viewing the customer's service record. In many, if not all cases, the order for changing the account is made over the telephone, and the customer is assured that the change has been made. PacBell's long delays in processing MACD orders puts MCI customers much worse off than are PacBell end users who choose to revise any aspect of their service and thereby will help deter migrations, increasing existing barriers to entry.

Q: Lastly, NOCs: how substantial are PacBell's delays and what adverse consequences follow?

A: MCI does not have complete records detailing the dates on which we received NOCs. Although we usually learn the crucial fact that an order has been completed only upon receipt of the NOC, once we do receive the NOC the date of principal importance to us is that on which the completion is recorded as having taken place, not the date of the NOC. Preliminary data suggest, however, that PacBell routinely notifies us of a completion

days, weeks, and sometimes months, after the completion itself has been effected.

Timely receipt of notification of order completion is critical for at least two separate reasons. First, a gap between actual completion and notification of completion places end users in a limbo in which they are recognized by neither PacBell nor the CLEC. PacBell's internal systems identify a previous customer as no longer its own as soon as a resale order has been completed. But a CLC like MCI cannot identify a new would-be customer for whom it has submitted a resale order as its own until it receives confirmation of completion. Consequently, if an end user experiences trouble during the gap between completion and notification of completion, neither PacBell nor MCI can respond. Of course, because we are aware of this potential problem, MCI will make the necessary inquiries any time we receive a trouble call from a customer whose status is listed in our databases as "completion pending." But we still cannot treat that customer as our own for purposes of trouble-resolution or billing until PacBell does confirm order completion.

Second, MCI cannot bill the end user until it receives notification of completion. If that notification comes late, MCI may miss a complete billing cycle and thus be compelled to present the end user with a surprisingly large bill for charges accumulated over several billing periods. One might suppose that customers would be pleased with such delayed billing because it means they hold on to their money longer. Long industry experience, however, has made clear that this is not the case. By and large, customers greatly prefer that their bills be regular and predictable. Consequently, late NOCs cause customer dissatisfaction and hurt MCI's reputation for customer service. Presumably for these reasons, among others, the Director of New Business Development for the MCI

account team at PacBell has acknowledged that a one-week gap between completion and NOC is too long. (Deposition Transcript of Deborah Nightingale (3/12/97), at 71)

Q: Please explain what problems MCI customers have had with regard to PacBell's 411 directory assistance database.

A: Speaking generally, the problem is that PacBell fails to record migrating end users' information into their 411 databases correctly. Among the various types of 411 errors PacBell has committed, the most common is for it simply to drop MCI customers that wanted to remain in the 411 database (and whose orders submitted by MCI accurately reflected that request). PacBell has also listed phone numbers for MCI customers incorrectly in the 411 database and has listed wrong phone numbers for other customers - for example, by listing the customer's fax line instead of its voice line. I have appended a brief abstract of some of these 411 problems as Attachment 7 to my testimony.

Q: How significant is this problem?

A: It is extremely significant, in terms of both the harm it causes affected customers (and, derivatively, MCI) and the frequency of its occurrence.

The harm it causes affected subscribers should be plain -- especially in the case of businesses that may rely heavily on directory assistance to draw prospective customers. A business's absence from the 411 directory (particularly when no forwarding number is supplied) will be construed as showing that the business has gone out of existence. Moreover, even if patrons know that the business is still in operation, the business may not receive inquiries as to goods and services provided, location, hours of operation, and

other issues that attract the public to the business. MCI local customers who have suffered loss of 411 directory listing include a movie theater, a bank, a regional department store, the branch office of a national charity, and numerous small businesses. Business customers are understandably concerned about the loss of revenue they may have suffered during the time they are inaccessible to the public because they were not listed in 411. Indeed, some business customers that migrated to MCI migrated back to PacBell upon discovering they had been dropped from 411. One customer with many separate locations migrated back to PacBell only after it had experienced recurrent problems over six weeks with the 411 listings for several of its separate stores.

Unfortunately, MCI does not know just how common this problem is because we lack visibility into PacBell's systems and listing databases. So, as is the case with regard to loss of dial tone (and loss of features) we learn of a 411 drop only when a customer calls in to complain. Because relatively few inquiries are made to 411 for non-business numbers, many residential customers may not be aware of an error in their 411 listings. Nonetheless, among business subscribers alone, MCI is already aware of nearly 200 instances in which an MCI customer has been erroneously dropped from, or incorrectly listed in, PacBell's 411 databases. The most recent cases have occurred this month, demonstrating that the problem continues. Despite our repeated requests, PacBell has refused to check 411 listings for small business customers migrated to MCI through December of last year.

Q: How long does it take PacBell to correct a 411 listing error?

A: It can take anywhere from 1 day to 2 weeks for PacBell to correct a listing after it has

been brought to their attention. On February 4, our account executive at PacBell confirmed that if directory listings problems are referred to her, they will be corrected within 48 hours. However, on February 28, MCI had to renew its request that listings be provided for two numbers for which we had already requested listings more than 10 days earlier.

Q: Have MCI customers experienced similar problems with the white and yellow pages, or the 555-1212 and E911 databases?

A: I simply do not know. PacBell has represented that the databases for 411, 555-1212, E911, and the white and yellow pages are all separately populated and maintained, and therefore that an error in one does not automatically result in an error in another. (The 411 databases, of course, contain local directory listings; the 555-1212 database contains listings for out-of-area-code subscribers.) And to date, no customer has reported any problem with either the 555-1212 or E911 listings or with the published directories. But that alone tells us very little. After all, a customer could not know that she is not listed in the E911 database, for example, until she calls 911 and is so informed by the answering operator. However, few of our customers would yet have had occasion to call 911. Similarly, the existence, and extent, of PacBell's listing errors will probably not be detected until all PacBell's local white pages and yellow pages directories have been published, and customers realize that their numbers have not been included. Therefore, it is reasonable to suspect that there exist as yet undiscovered problems in these other databases and directories too unless PacBell's method of updating the E911 and 555-1212 databases differs from the manner in which it updates the 411 databases in such a

way that only the latter method would create a risk of error. As I will explain below, that does not appear to be the case.

Q: Lastly, please explain the problems MCI customers have experienced with loss of features.

A: Many MCI customers have lost features like call waiting, call forwarding, and call return during migration from PacBell. Similarly, some customers with call forwarding have retained the feature but found that their calls were forwarded to incorrect numbers. Although it is impossible to measure the full incidence of feature loss because customers may not themselves become aware of a loss for weeks or longer, there is no doubt that it does occur. Furthermore, it is clear that both MCI and PacBell have been at fault on occasion, though it is not always easy to determine which carrier is responsible in a given case.

Perhaps the most damaging thing about feature loss is the way it combines with PacBell's substantial order backlog to penalize, and thus deter, migration to CLCs. Imagine a customer that migrates from PacBell to MCI and loses call forwarding during the migration. If PacBell acknowledges fault it will allow us to "escalate" the problem, meaning that it will restore the lost feature "as soon as possible"; if PacBell denies fault, it will require MCI to submit a MACD order for change in service, which PacBell will then place at the end of the processing queue. Many customers will be unwilling to risk losing important features for upwards of a month. Therefore, risk of feature loss and order completion delay together create a systematic disincentive to migration. Although PacBell is partially responsible for the risk of feature loss, and is wholly responsible for

the delay in order processing, CLCs and CLCs' customers pay the price.

Q: In your opinion, what are the causes of the four major problems you've mentioned?

A: The fundamental cause is that PacBell's method of order processing depends far too heavily on human intervention -- most particularly that service representatives and data entry clerks manually type substantial amounts of information into PacBell's computer systems at several discrete steps. This situation is a recipe for error and delay. Furthermore, PacBell has made this inherently bad situation worse by failing to make responsible and timely corrections when system flaws are revealed, and by refusing to hire anywhere near the number of service representatives PacBell's manual-intensive processing warrants.

Q: You state that PacBell's procedures for processing a resale order are too manually dependent. Would you please describe the steps involved in migrating a customer from PacBell to MCI?

A: The process begins, of course, with the submission of a resale order from MCI to PacBell. MCI follows two different processes in submitting an order to PacBell, depending on the type of order, and relatedly, the type of customer at issue -- residential customers and small businesses customers on the one hand, and larger business customers on the other.

Q: Why is MCI's order entry process different for these different types of customers?

A: There are two principal reasons. First, residential and small business customers (what I will collectively call "mass markets" customers) tend to have simpler service

arrangements than do large business customers. Second, MCI takes orders from mass markets customers over the phone, often on calls initiated by the prospective customer. In contrast, the more complex orders from large business customers are developed by MCI business representatives in face-to-face meetings with the customer.

Q: What processes are involved when submitting an order for a mass markets customer?

A: The process begins when a prospective customer calls MCI and his or her call is directed to the Mass Markets Sales and Service Center. The MCI customer representative then discusses service options, such as available features and telephone numbers, with the prospective customer. If the customer requests service from MCI, the customer representative enters all the necessary information -- including the customer's name and address, telephone numbers, requested features, and directory listings -- into MCI's internal computer systems. After third-party verification (TPV) is completed, thereby confirming that the customer wishes to select MCI as his or her local service provider, MCI transmits a resale order containing much of the information noted above to PacBell's Local Interconnection Service Center (LISC).

When MCI began to submit resale orders to PacBell, in the middle of September 1996, these orders were sent by fax. Since PacBell began to accommodate the receipt of orders for Plain Old Telephone Service (POTS) by Network Data Mover (NDM) on February 6, most mass markets orders have been transmitted over NDM. Orders are sent in batches four times a day via this electronic feed to the LISC.

Q: What processes are involved when submitting an order for a large business customer?

A: The business markets order process begins when an MCI sales representative contacts a prospective customer by phone or in person. If the business chooses MCI as its local carrier, the MCI representative will start writing a resale order. Unlike the case for mass markets customers, however, the sales rep cannot rely on the customer's own recollection as to its present package of services to complete the order. Because large businesses tend to subscribe to a complex package of local services involving a large number of separate lines and often multiple locations, the MCI representative must write the resale order off the business's existing customer service record (CSR) to ensure completeness and accuracy. For this reason, the MCI representative will obtain the customer's consent to secure the CSR from PacBell. Receipt of the CSR is a critical step in the entire process; MCI cannot complete the write-up of an order without it. However, as David Williams details in his testimony, PacBell has been very slow in transmitting these necessary records to MCI.

Once MCI does complete an order, it transmits it to PacBell's LISC. Unfortunately, NDM does not yet support most of the features and services required by larger business customers -- for example DID and supertrunks. (e.g., Nightingale Transcript, at 55; Deposition Transcript of Kathlene Korona (3/18/97), at 33). Consequently, MCI is forced to continue to transmit resale orders for the great majority of our larger business customers by fax.

Q: Based on your own knowledge and on information provided by PacBell, can you describe how PacBell processes a resale order once it has received it from MCI?

A: I should emphasize at the outset that neither I nor anyone at MCI has direct visibility into

PacBell's LISC. PacBell has repeatedly refused MCI requests to visit the LISC and for meaningful descriptions of LISC order processing flows. My conclusions are therefore based on information supplied by PacBell during recent CPUC-sponsored workshops, and through discovery in this proceeding, as well as my knowledge of the outputs of PacBell's processing. I have appended deposition transcripts of PacBell witnesses as attachments to this testimony. The attachments are as follows: Deposition Transcript of Ann Marie Long (Att. 2); Deposition Transcript of Kathlene Korona (Att. 3); Deposition Transcript of Deborah Nightingale (Att. 4); Deposition Transcript of Susan Virginia Fischer (Att. 5); Deposition Transcript of Lesley Wood (Att. 6).

As I mentioned, an order can reach PacBell either by fax or electronically, over NDM. But this distinction does not make a meaningful difference in the way PacBell processes the order because the first thing PacBell does after receiving an order by NDM is to print it out on paper. That is, at present, the processing of an order by PacBell always begins with a paper order -- either the actual facsimile transmission or a print out of an NDM transmission. Starting with the pieces of paper that comprise MCI's order -- which can be as many as 30 pages long (Deposition Transcript of Ann Marie Long (3/21/97) at 71) -- PacBell's processing is extremely manual-intensive. Indeed, PacBell's LISC manager has indicated that as many as four different people will physically type information off the MCI order at least seven separate times into at least six discrete PacBell computer systems and databases. (Deposition Transcript of Ann Marie Long, at 62-135)

The first step is to take the paper order to the LISC command center where an employee types information from the order into the LISC Tracking Database (LTD) that

will be used to track the progress of a resale order through the LISC. The information inputted at this time includes the Purchase Order Number (PON) supplied by the CLC, the end-user's billing number (BTN), and the date and time the order was received at the LISC.

Q: How long does it take, from the time the LISC receives MCI's order, until the order has been entered into PacBell's LTD?

A: I do not know. The PacBell Business Manager in charge of Customer Care at the LISC has stated that PacBell has no standard time interval for this step, and, furthermore, that she herself has no particular expectation, and no opinion, as to how long this first piece of the many-stepped process should take. Indeed, she was unwilling to suggest that so long an interval as six weeks was too long. (Deposition Transcript of Ann Marie Long, at 69-70)

Q: What happens after information has been entered into the LTD at the Command Center?

A: The agent who inputted information into the LTD staples the order together, places it into an envelope, and sends it out to other individuals at the LISC (order writers or service representatives) for further processing. The person who receives this package (whom I will refer to as the "order writer" for simplicity) then types the relevant order information into PacBell's Service Order Retrieval and Distribution system (SORD), the computer system that manages the actual migration. Critically, the order writer must enter the order information twice in order to effect the migration. The first order, called a "D" order, instructs SORD to disconnect the end user's existing service. The second order, called a

"C" order, instructs SORD to connect the end user for "new" service, this time as a customer of MCI. (Deposition Transcript of Ann Marie Long, at 106-17) Under direction from SORD, the D and C orders independently navigate through a dozen or more separate PacBell databases and software programs, updating and revising information necessary for billing and for connecting the customer to the switch, among other things. When working on the C order, the order writer also inputs a scheduled completion date -- supposedly 3 business days after the order was received at the LISC. (Deposition Transcript of Ann Marie Long, at 89-90)

Q: Is the order writer finished at this point?

A: No. After submitting the D and C orders, but at the same sitting, the order writer switches from SORD into CLEO, a separate PacBell computer subsystem. The writer then retypes into CLEO the order number, the PON, the due date and other relevant information pertaining both to the CLC that submitted the order and to the content of the order itself. (Deposition Transcript of Ann Marie Long, at 88-98) Once the information has been inputted, CLEO formats it into the Firm Order Confirmation, or FOC, which I mentioned earlier. The FOC is then transmitted in batch files by periodic NDM feed back to the CLC (five times a day in MCI's case). Lastly, after completing data entry into CLEO, the order writer switches into LTD to update the tracking system by noting the date on which the FOC was sent. (Deposition Transcript of Ann Marie Long, at 118)

Q: What happens next?

A: After keying data into SORD, CLEO, and LTD, the order writer prints out copies of the C

and D orders she has created, puts them in the envelope with the printout of the order MCI had submitted, updates the front of the envelope, and sends the package back to Central Command, where it is in turn circulated to the LISC's completion desk and filed by completion date. (Long Transcript, at 119-26)

In the afternoon of each day, representatives from the completion desk pull out the folders of orders that were scheduled for completion on that day and log into SORD. If SORD reveals that a given order has been completed -- meaning that the end user has been successfully migrated to the CLC -- the completion agent enters CLEO and types in additional information related to that order, including all the features and services the end user now has and the actual date on which completion was effected. Just as CLEO had earlier done with regard to FOCs, CLEO then formats this newly inputted information into the notification of completion (NOC). The NOC, again like the FOC, is transmitted in batch files by periodic NDM feed back to the CLC.

Q: What happens if SORD reveals that a given order has not been completed?

A: In that event, completion personnel are supposed to trouble shoot the order process to determine the reason for failure and to fix the problem if possible. They should send the CLC a "jeopardy" notice so the CLC can apprise its migrating customer of the expected delay.

Q: Assuming that SORD conveys that the order has been successfully completed, what happens next?

A: I mentioned earlier that SORD manages the navigation of a resale order (which has been

separated into distinct D and C orders) through a large number of separate PacBell systems and subsystems. However, that process does not automatically update all directory databases. Accordingly, after CLEO is updated, a LISC employee (either a completion representative or a data enterer) must type new listing information into the 411, 555-1212, and E911 databases. Because each of these databases is separate from the others (e.g., Deposition Transcript of Ann Long, at 133; Deposition Transcript of Kathlene Korona (3/18/97) at 63-64), the PacBell employee must manually enter the information three separate times.

At this point, the migration process is essentially complete.

Q: Given the systems and practices PacBell employs, do you have any conclusions regarding how each of the four problems you described earlier -- loss of dial tone, delayed migration to MCI's local service, loss of 411 listing, and loss of service features -- occurs, and how each could be cured?

A: Yes. Let us address the loss of dial tone first. It appears that loss of dial tone during migration occurs when the D and C orders become unlinked.

The obvious solution, therefore, is for PacBell to cease dividing CLCs' resale order into separate orders for disconnect and connect. There does not appear to be any inherent need to turn a migration order into an order for service disconnect. A PacBell subscriber that elects to receive local exchange service from a reseller is not, after all, terminating all local exchange service and there is no reason PacBell's systems should process a migration order as though it were. My understanding is that the disconnect-reconnect process deletes all record of the customer from PacBell's systems, including

the customer's connection to the switch, and then repopulates all PacBell systems from scratch. Instead, PacBell should begin its processing of a resale migration order on the assumption that everything remains the same, thereby instructing changes only in those of the dozen or more systems that need be affected. That is, for example, the resale order should pass through the billing name system to change the billing name from the end user to the CLC, and to ensure billing through CABS instead of CRIS; it should pass through the network provisioning system only if the end user had elected a change from, say, measured-rate to flat-rate service; etc. PacBell should process migration orders in this way, thereby minimizing risk of the types of service-affecting problems PacBell's current processing method creates.

Q: How has PacBell proposed to resolve this problem?

A: First, for a long time PacBell did not propose any solution. Instead, PacBell offered only to reconnect dial tone on a case-by-case basis after we reported the customer was out of service. Moreover, PacBell has no established procedures for such reconnection. Insofar as PacBell has offered anything approaching a solution, it has always been the same. It appears that the D and C orders each contain a particular field that can accommodate information specifically intended to link the two orders. PacBell has alleged that loss of dial tone can be avoided so long as the D and C orders are tagged with a particular field identifier, or FID, in such a way as to remind LISC representatives who make changes to disconnect orders that corresponding changes may have to be made to connect orders. On several occasions, PacBell has claimed that it has improved, or will improve, the training of LISC representatives to ensure that they will make, and respect, the appropriate FIDs.